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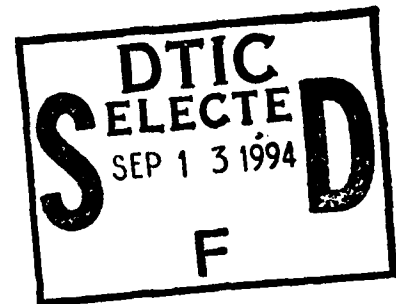
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EUROCAP PROGRAM-EBRE STATION

4th Interim Report

(June 1994 - August 1994)

by



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SOUNDING ACTIVITY

Hourly vertical incidence ionograms have been produced with the digisonde during the whole period June - August 1994. The equipment was working regularly and only was shut down during periods of strong atmospheric thunderstorm, to prevent it to be damaged. The ARTIST output of the ionograms have been sent regularly to Fort Monmoth in floppy 5 1/4" HD diskettes, as usual.

The performance of the receiving antennas has been improved by conveniently changing the internal voltages of the preamplifiers, while awaiting the development of the new preamplifier model of the University of Massachusetts Lowell.

A campaign of rapid vertical incidence sounding (every 15 minutes) was conducted for a week in June, as requested by the mapping working group of the PRIME project. The four ionospheric parameters, needed by the working

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group, have been reduced and sent to the PRIME data bank.

OTHER ACTIVITIES

A poster was presented at the 11th International Beacon Satellite Symposium held at Aberystwyth, Wales on 11-15 July. The paper deals with the comparison of the total electron content (TEC) data of the ionosphere obtained in the Ebre Observatory from GPS signals, with TEC data obtained from IRI and De Giovanni-Radicella models.

Two scientists of the Observatory participated in the training seminar of the University of Massachusetts Lowell, for the use of the digisonde and the related programs, mainly ARTIST and ADEP. The program included a description of the new portable digital ionosonde. Unfortunately, the University has decided not to produce the digisonde any more. They will dedicate all their effort to the production and further development of the portable digital ionosonde.

Two papers have been prepared for the next PRIME meeting in El Arenosillo, Huelva, Spain. One of them compares the vertical true height ionospheric profile obtained by the ARTIST, with profiles obtained from the

IRI and De Giovar dicella models. The other paper deals with the daily variability of foF2 introduced by the quasi-two-day oscillations.

After El Arenosillo meeting, one more is proposed in Rome next January. The details of this meeting will be discussed in El Arenosillo. If an extension of PRIME is approved by COST, two more PRIME meetings will be held next year.

It seems that there were no proposals to modify the draft Memorandum of Understanding (MOU) of the new project, PRIME-2. Therefore it will be forwarded for consideration at the next October CSO meeting. We hope it will be approved at that meeting by the COST Authorities.